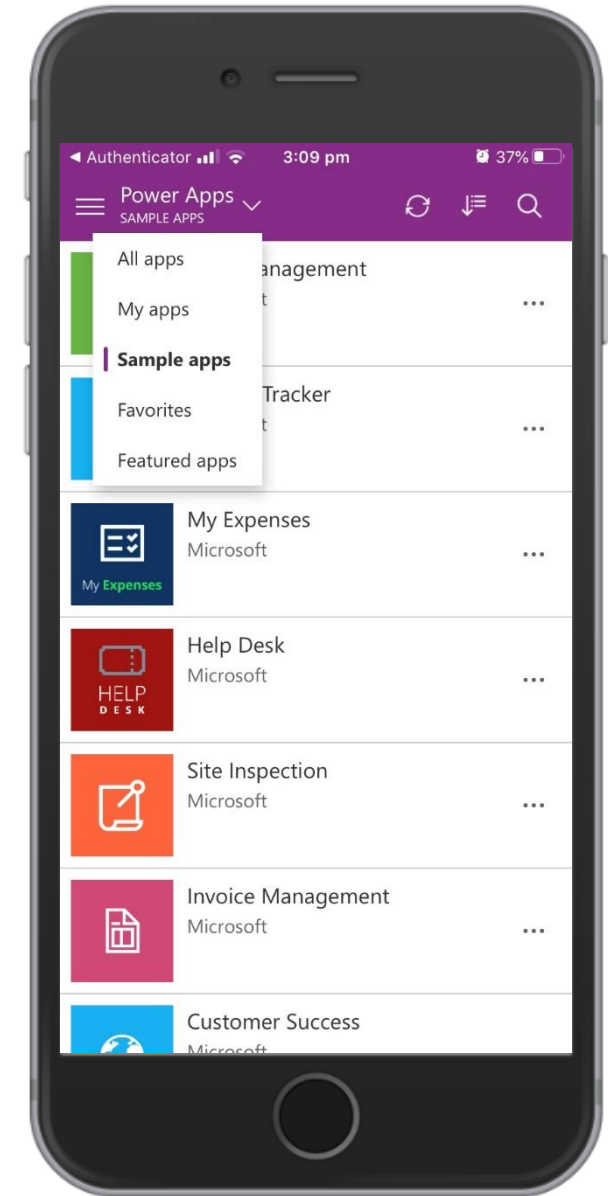# Getting Started

Topics

- Building a new app from a data source
- Add, edit and remove controls and screens
- Formulas
- Testing an app
- App settings
- Save, publish and share apps
- Version history and restore
- Power Apps mobile app

Before you start have an idea

How to create an app

Microsoft sample template
- Have an amazing app in minutes
- It's not specific to your requirements
- Can be difficult to customise as you didn't create it and they are complex
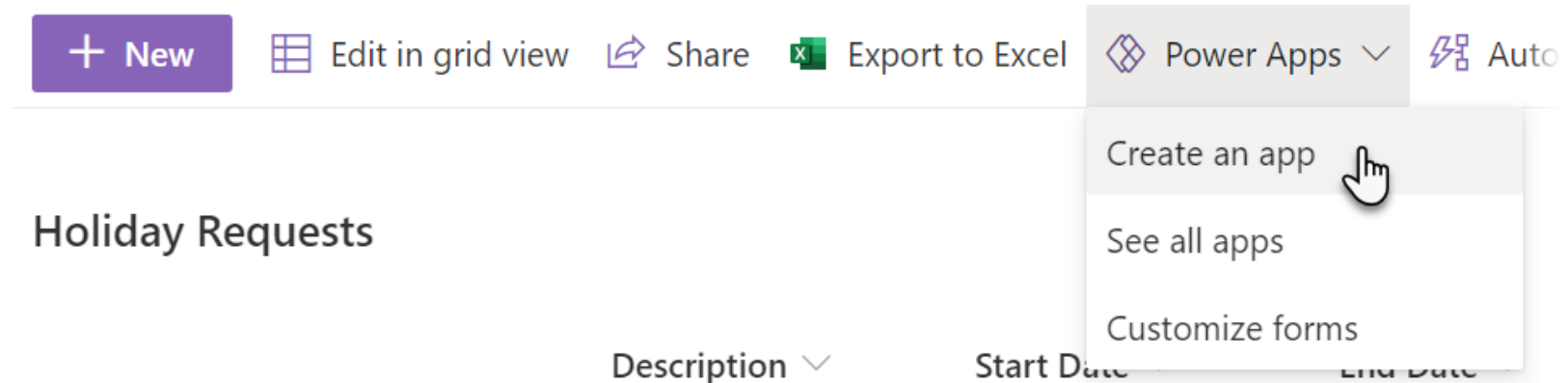
From a blank template
- The most time consuming

From data source
- Create an app in just a few clicks
- App is relevant to your existing data source
- Works for many data sources

Building a new app from a data source

- Existing SharePoint list
- App requirements:
  - View existing Items
  - Search items
  - Add new Items
  - Update existing Items
  - Delete items
- Don't worry if you aren't planning to use SharePoint in your apps, the techniques we use here will work with many other data sources

This can all be created in 2 minutes!

+ New   Edit in grid view   Share   Export to Excel   Power Apps ∨   Auto

Create an app

See all apps

Customize forms

Holiday Requests

Description ∨   Start Date   End Date

Power Apps designer interface

App launcher

Ribbon

Formula bar

Tool bar

Tool pane

Power Apps | Canvas

Environment
Combined Knowledge (...

Environment

File   Home   Insert   View   Action   Settings   Appraisals - Proof of Concept

New screen ∨   Aa Theme ∨   15   B / U abc A∨   ∨ Fill ∨   Border ∨   ∨   Reorder ∨   Align ∨   Group ∨

OnSelect   =   fx ∨   Navigate(Screen1)

Tree view   ICON   Canvas

Screens   Components   Icon1   Properties pane

Search   Properties   Advanced

App   Objectives   Save objectives

Screen1   *Name   Helen Kenner   Total objectives: 5   Total Completed: 3

Image1   Assigned Chris Casingena   Total In Progress: 1

Button1   Title   Description   Status   Total Not Started: 1

Header_1   Format B / U   Not Started

Gallery1   Save objectives

Screen2   Employ Junior   Campaign   Completed

Label6   Employ Junior5

Icon2_1   Employ Junior   Campaign   In Progress

                                                            Employ Junior4

··· Icon1   — | + 30 % ⤢

Icon   Home

Rotation   0

Display mode   Edit

Visible   On

Position   1291   23
                     X   Y

Size   64   64
                    Width   Height

Padding   0   0
                    Top   Bottom

                    0   0

Add, edit and remove controls and screens

- Controls
  - Controls are the building blocks of Power Apps
  - Each control can be configured using properties
  - We will continue to learn about controls in all modules of this course, module 4 is dedicated to the subject of controls
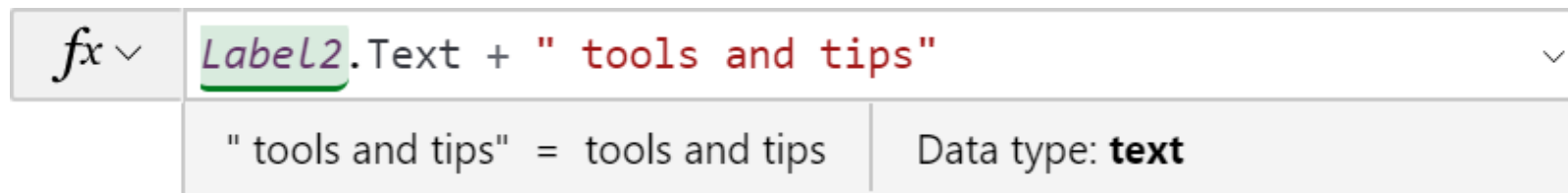 - More than one control can be selected while holding the **Ctrl** key, allowing grouping
- Screens
  - You can also add new **screens** to your app
  - The screen at the top of the list is the first screen that opens on the app

Formulas – Power Fx

- Like Microsoft Excel, you can achieve so much more by learning about formulas
- Formulas make your Power Apps dynamic, for example
  - Static Date   "3rd Jan 2020"
  - Dynamic Date   Today( )
- Formulas use functions which can relate to other controls in the app and even other services
- Power Apps uses intellisense

```
fx ∨    Label2.Text + " tools and tips"                          ∨
        " tools and tips"  =  tools and tips    │    Data type: text
```

- Separate formulas can be stitched together with a **semicolon**, for example:
Navigate(Features, ScreenTransition.Fade);Clear(CustomerCheckList)

What can formulas do?

- Formulas are not only used for calculating numbers, they can be used for:
  - Navigation (move between screens)
  - Save information to a data source
  - Apply conditional formatting
  - Display information about the current user
  - Display your current location
  - Pass information from one control to another control
  - And more...

| OnSelect ∨ | = | *fx* ∨ | Navigate(*Video*, Fade) ∨ |

Microsoft Power Apps functions

Action	Collection	Data	Device	Logic	Mathematical	Text
Concurrent	Collect	Calendar	App	And/Or	Average	Concatenate
Exit	Filter	DateDiff	Clock	Blank	CountRows	EncodeUrl
Launch	FirstN	Defaults	Connection	If	Len	Find
Navigate	ForAll	RGBA	Enable/Disable	IsBlank	Min	HashTags
Notify	RemoveIf	Set	Lanaguage	IsMatch	Rand	Split
Refresh	Search	SubmitForm	Param	IsNumeric	Round	Text
Revert	Select	Today	User	Not	Sum	Value

https://docs.microsoft.com/en-us/PowerApps/maker/canvas-apps/formula-reference

Formula example

- Adding the contents of two input boxes
- The result is displayed in a label

- You will learn about formulas during every module on this class

Testing an app

- While creating an app in the canvas formulas will be recalculated automatically
- Hold down **ALT** to test buttons including navigation function
- Click **Preview** to run the app
- Use the **App checker** to locate errors and accessibility issues

App checker
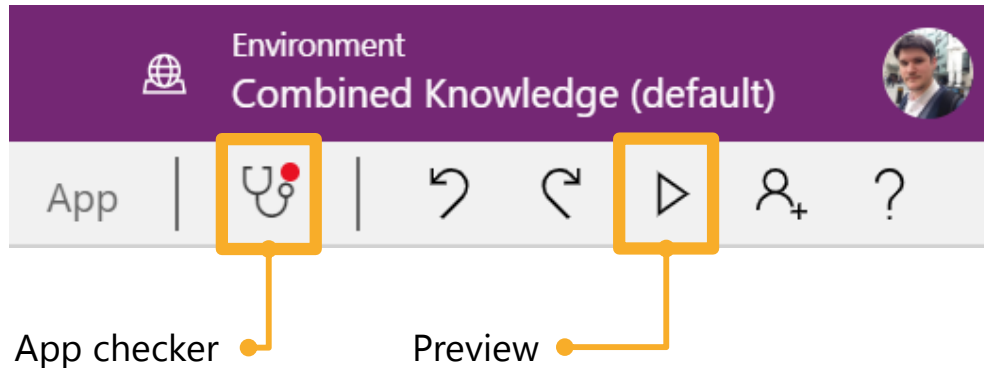
Preview
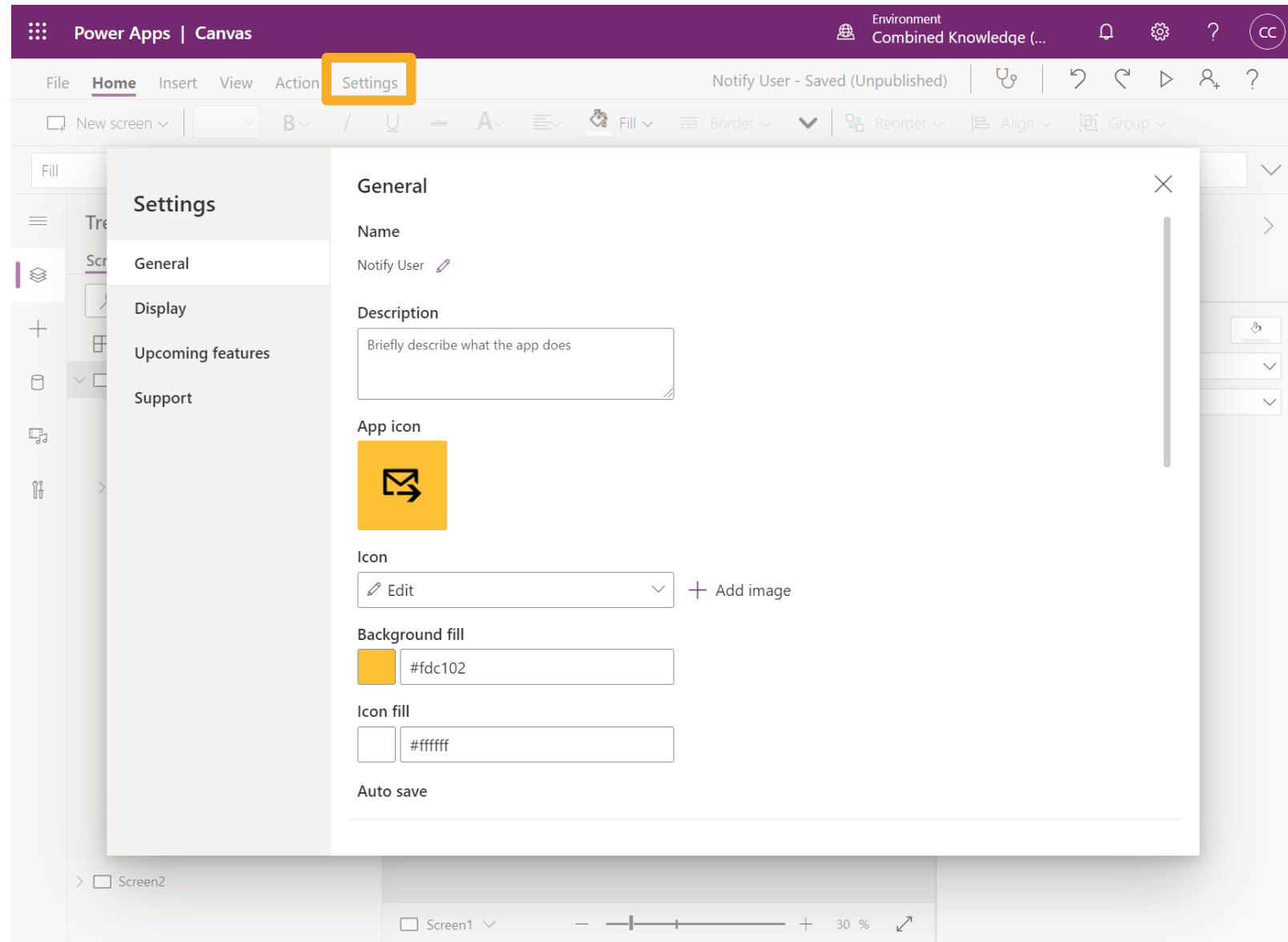
Results by screen

∨ Errors (1)

∨ TechSpecs (1)

Name isn't valid. This identifier isn'...
Body1
.Text

App settings

- Choose your apps:
  - Name
  - Icon
  - Description
  - Display
- Choose to include or exclude preview, experimental and deprecated features

Screen size and orientation

Display

Select the screen size and orientation for your app.

Orientation

🗔 Landscape	⌄

Size

16:9 Default	⌄

Scale to fit

Scales the app to fit available space. Turning this off allows control layout adjust to the available space.

⬤ On

Lock aspect ratio

Locking this automatically maintains the ratio between height and width to prevent distortion.

⬤ On

Lock orientation

Locking orientation keeps the screen in its current orientation, even when the device is rotated.

⬤ On

Advanced Settings

Advanced settings

Data row limit for non-delegable queries

Set how many rows are retrieved from server-based connections where delegation is not supported.

Value:

500

Preview features

These features will be turned on for all apps soon. Please test your apps with these features enabled and report any problems

Delayed load

Speed up your app's start time by setting on-demand screen expression calls.

On

Use non-blocking OnStart rule

In the published app, allows the app's OnStart rule to execute in parallel with other app rules. When disabled, your app's other rules will wait for OnStart to finish before executing.

Off

Explicit column selection

Optimizes load times and reduces memory consumption by only fetching columns used in your app. Target data source must support this feature.

Off

Experimental features

These features might change, break, or disappear at any time.

Formula-level error management

Create custom errors to improve app usability and gather valuable error information.

Off

Optimize embedding appearance

Optimizes for embedded experiences by aligning the app to top left. Turning this setting on will change the embedded background color to white.

Off

Container control

Create hierarchical layouts for responsiveness and accessibility.

Off

Deprecated features

These features will be replaced or removed soon. Select the information icon to learn about the alternatives and timeline.

Enable Rules

Use the Rules interface to create conditions and record actions to modify an app.

Off

Relational data, option sets, and other new features for CDS

Enjoy deeper data type and relationship support with CDS. See the Power Apps blog for more details. If you encounter any problems please let us know through the community forum.

Off

Save, publish and share an app

- The buttons to save, publish then share can only be accessed in sequence, for example you can't share until you have first saved and published

  - **Save** – stores the app for future reference (in some situations your first save will automatically publish as well)

  - **Publish** – "go live" the app is now available for you to use

  - **Share** – make the app available to other users in your organisation
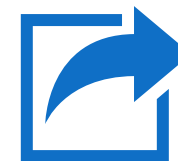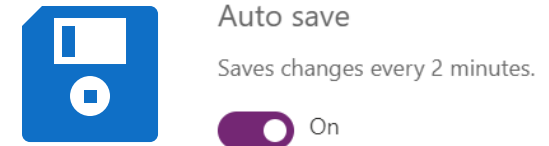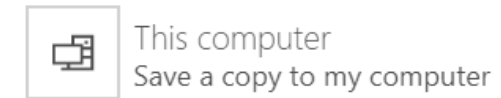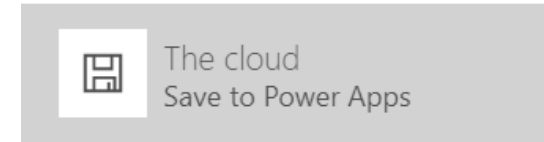
Sharing an app

- You can share an app with
  - Individuals
  - Security Groups
  - Entire Organisation
  - Guests (if already in Azure AD)
- Make sure to also share data sources
- You can offer the following access levels:
  - Can use – consume the app on a mobile device or in location where it is embedded, for example in a SharePoint Online page
  - Co-owner – consume the app and edit the apps design

Enter a name, email address, or Everyone

Shared with   Sort by Name ⌄

Chris Casingena
Owner

CH Claire Hodgson   ✕
Co-owner

Claire Hodgson
This user can use this app.

☑ Co-owner
Can use, edit, share app but not delete or change owner.

Data permissions ⓘ

Make sure your users have access to the data used in your app, including gateways, APIs, connectors, and entities.

Excel

OneDrive for Business

Magnus Flett (guest)
This user can use this app.
ⓘ Guests can be Users but not Co-owners.

☐ Co-owner
Can use, edit, share app but not delete or change owner.

Version history and restore

Version		Modified	Modified by	Power Apps relea...	Published
Version 8	...	03/12/2019 12:27:20	Chris Casingena	3.19112.26	Live
✔ **Version 7**	...	03/12/2019 10:34:53	Chris Casingena	3.19112.26	
Version 6	...		Chris Casingena	3.19112.26	
Version 5	...	02/12/2019 14:58:04	Chris Casingena	3.19112.26	

↻ Restore

🗑 Delete

Power Apps mobile app

- The Power Apps mobile app is the often the most convenient way for a user to consume a Power App

- The touch screens on mobile devices provide a great way to interact with apps

- You can get the app for:
  - Windows Phone devices
  - iOS devices
  - Android devices

- Try a sample app, if you haven't published any apps yet